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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,127	04/26/2001	Reginald C. Shiverick	2589-101	6542

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TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2172	4

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)
Office Action Summary	09/842,127	SHIVERICK ET AL.
	Examiner	**Art Unit**	
	Baoquoc N To	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-48* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)   4)☐ Interview Summary (PTO-413) Paper No(s). _____ .

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5)☐ Notice of Informal Patent Application (PTO-152)

3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6)☐ Other: _____ .

DETAILED ACTION

1.   1-48 are presented for examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bolnick et al. (US. Patent No. 5,838,317).

Regarding on claim 1, Bolnick teaches a computer-implemented information

retrieval method, comprising the steps of:

Generating a filtering query by specifying at least one query operator from

selected data grouping of a filter tree table (col. 27, lines 1-14);

Running said filtering query against an unfiltered data table containing items of

data (col. 27, lines 1-4);

Creating a filtered data table by receiving one or more data items filtered from

said unfiltered data table in response to said filtering query and placing said received

data items in said filtered data table (col. 28, lines 10-25);

Displaying date items in said filtered data table (col. 28, lines 10-18);

Displaying filter data items in said filtered data table, with said filter data including

selected data groupings (col. 28, lines 10-18);

Accepting a user input that selects or de-selects a data grouping to be filtered

and displayed (col. 4, lines 50-65); and

Branching back to the generating step upon receipt of said user-input (col. 4,

lines 50-65).

Bolnick does not explicitly teach filter tree table. However, Bolnick teaches, "if

the full query filtering is specified by the indexed frame, then control passes to step 302"

(col. 27, lines 6-7). This teaches these frames are the table tree. Therefore, it would

have been obvious to one ordinary skill in the art at the time of the invention was made

to include the frames structure as the tree table in order to provide the consistent of the

data after filtering process.

Regarding on claim 2, Bolnick teaches selecting one or more data sets (col. 4,

lines 50-65);

Creating said unfiltered data table by receiving in said unfiltered data table a

plurality of data items from said one or more data sets (col. 28, lines 10-25);

Displaying said plurality of data items of said unfiltered data table (col. 28, lines

10-25); and

Updating said filter tree table, with said filter tree table including selectable data

groupings for said one or more data sets (col. 8, lines 3-19).

Regarding on claim 3, Bolnick teaches generating a summary query from

selected data groupings of said filter tree table (col. 5, lines 43-53);

Running said summary query against said filtered data table (col. 5, lines 43-54);

Generating a summary result comprising a data item count for each selected

data grouping (col. 25, lines 28-41); and

Updating said filter tree table with said summary result (col. 18, lines 53-67).

Regarding on claim 4, Bolnick teaches the step of generating one or more data

item results in response to said summary query (col. 25, lines 28-41).

Regarding on claim 5, Bolnick teaches a preliminary step of selecting a data set

(col. 4, lines 50-65).

Regarding on claim 6, Bolnick teaches data set comprises a database (col. 16,

lines 50-60).

Regarding on claim 7, Bolnick teaches data set comprises one or more data

tables (col. 11, lines 1-10).

Regarding on claim 8, Bolnick teaches a first filter level of said filter tree table

corresponding to a column in said data set (col. 28, lines 55-60).

Regarding on claim 9, Bolnick teaches the step of displaying a data item count

for a particular data grouping (col. 18, lines 53-65).

Regarding on claim 10, Bolnick teaches the step of displaying a data item count for a particular data grouping and updating all data items counts upon a data grouping selection or de-selection by said user (col. 14, lines 53-59).

Regarding on claim 11, Bolnick teaches all data grouping are automatically recalculated upon a selection or de-selection by said user (col. 4, lines 50-65).

Regarding on claim 12, Bolnick teaches generating a filtering query step includes creating said filtering query based on selected data groupings (col. 28, lines 10-25).

Regarding on claim 13, Bolnick teaches filtering query is a SQL query (col. 27, lines 15-22).

Regarding on claim 14, Bolnick teaches accepting a user input includes a user clicking on a selection icon, with said selection icon corresponding to a predetermined data grouping (col. 18, lines 30-35).

Regarding on claim 15, Bolnick teaches a computer-implemented information

retrieval method, comprising the steps of:

Selecting one or more data sets (col. 4, lines 50-65);

Creating a unfiltered data table by receiving in said unfiltered data table a

plurality of data items from said one or more data sets (col. 7, lines 47-52);

Displaying said plurality of data items of said unfiltered data table (col. 7, lines

47-52);

Generating a filter tree table, with said filter tree table including selectable data

grouping for said one or more data sets (col. 5, lines 43-54);

Generating a filtering query from selected data grouping of said filter tree table,

with said filtering query comprising one or more query operators (col. 27, lines 1-14);

Running said filtering query against said unfiltered data table (col. 27, lines 1-14);

Creating a filtered data table by receiving in said filtered data table one or more

data items filtered from said unfiltered data table in response to said filtering query (col.

28, lines 10-25);

Displaying data items in said filtered data table (col. 28, lines 10-18);

Generating a summary query from selected data grouping of said filtered tree

table (col. 5, lines 43-54);

Running said summary query against said filtered data table (col. 5, lines 43-54);

Generating a summary result comprising a data item count for each selected

data comprising (col. 25, lines 28-41);

Updating said filter tree table with said summary results (col. 18, lines 53-59);

Displaying filter data in said filter tree table, with said filter data including selected data grouping and associated data item counts (col. 20, lines 45-61);

Accepting a user input that selects or de-selects a data grouping to be filtered and displayed (col. 4, lines 50-65); and

Branching back to said updating a filter tree table step upon receipt of user input (col. 20, lines 11-24).

Bolnick does not explicitly teach filter tree table. However, Bolnick teaches, "if the full query filtering is specified by the indexed frame, then control passes to step 302" (col. 27, lines 6-7). This teaches these frames are the table tree. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the frames structure as the tree table in order to provide the consistent of the data after filtering process.

Regarding on claim 16, Bolnick teaches data set comprises a database (col. 16, lines 50-60).

Regarding on claim 17, Bolnick teaches data set comprises one or more data tables (col. 18, lines 30-35).

Regarding on claim 18, Bolnick teaches a first filter level of said filter tree table correspond to a column in said data set (col. 27, lines 6-7).

Regarding on claim 19, Bolnick teaches data item counts are automatically updated upon a data grouping selection or de-selection by said user (col. 18, lines 53-59).

Regarding on claim 20, Bolnick teaches all data grouping are automatically recalculated upon a selection or de-selection by said user (col. 18, lines 53-59).

Regarding on claim 21, Bolnick teaches generating a filtering query step includes creating said filtering query based on selected data groupings (col. 27, lines 1-14).

Regarding on claim 22, Bolnick teaches filtering query is a SQL query (col. 17, lines 15-22).

Regarding on claim 23, Bolnick teaches accepting user input includes a user clicking a user clicking an a selection icon, with said selection icon corresponding to a predetermined data grouping (col. 18, lines 30-35).

Regarding on claim 24, Bolnick teaches summary results further includes a data item result for said each selected data grouping (col. 25, lines 28-41).

Regarding on claim 25, Bolnick teaches an information process, comprising the steps of:

Providing a data set to an unfiltered data table (col. 4, lines 50-65);

Generating a filtering query by selecting one or more query operators and with said one or more query operators corresponding to selected data grouping in a filter tree table (col. 27, lines 1-14);

Running said filtering query against said unfiltered data table (col. 27, lines 1-14);

Receiving one or more data items in a filtered data table, with said one or more data items being filtered from said unfiltered data table in response to said filtering query (col. 28, lines 10-15);

Displaying said one or more data item in said filtered data table (col. 20, lines 45-61);

Generating a summary query from selected data grouping in said filter tree table (col. 28, lines 10-18);

Running said summary query against said filtered data table to produce a summary result, with said summary result comprising a data item count for each selected data grouping (col. 5, lines 53-54);

Providing said summary result to said filter tree table (col. 25, lines 28-41);

Displaying said filter tree table (col. 20, lines 45-61);

Accepting a user input to said filter tree table, with said user input comprising a selection or de-selection of a data grouping (col. 4, lines 50-65); and

Branching back to the step of generating a filtering query upon receipt of a user input (col. 20, lines 11-24).

Bolnick does not explicitly teach filter tree table. However, Bolnick teaches, "if the full query filtering is specified by the indexed frame, then control passes to step 302" (col. 27, lines 6-7). This teaches these frames are the table tree. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the frames structure as the tree table in order to provide the consistent of the data after filtering process.

Regarding on claim 26, Bolnick selecting one or more data sets (col. 4, lines 50-65);

Creating said unfiltered data table by receiving in said unfiltered data table one or more data items from said one or more data sets (col. 7, lines 47-52);

Displaying said one or more data items of said unfiltered data table (col. 7, lines 47-52); and

Updating said filter tree table, with said filter tree table including selectable data groupings for said one or more data sets (col. 18, lines 53-59).

Regarding on claim 27, Bolnick teaches a preliminary step of selecting a data sets (col. 4, lines 50-65).

Regarding on claim 28, Bolnick teaches data set comprises a database (col. 18, lines 30-35).

Regarding on claim 29, Bolnick teaches data set comprises one or more data tables (col. 18, lines 30-35).

Regarding on claim 30, Bolnick teaches a first filter level of said filter tree table corresponds to a column in said data set (col. 27, lines 6-7).

Regarding on claim 31, Bolnick teaches data item counts are automatically updated upon a data grouping selection or de-selection by said user (col. 18, lines 30-35).

Regarding on claim 32, Bolnick teaches all data grouping are automatically recalculated upon a selection or de-selection by said user (col. 4, lines 50-65).

Regarding on claim 33, Bolnick teaches generating a filtering query step includes creating said filtering query based on selected data grouping (col. 28, lines 10-15).

Regarding on claim 34, Bolnick teaches filtering query is a SQL query (col. 17, lines 15-22).

Regarding on claim 35, Bolnick teaches accepting user input includes a user

clicking on a selection icon, with said selection icon corresponding to a predetermined

data grouping (col. 18, lines 30-35).

Regarding on claim 36, Bolnick teaches summary result further includes a data

item result for said each selected data grouping (col. 25, lines 28-41).

Regarding on claim 37, Bolnick teaches an information retrieval, comprising:

A processor (col. 32, lines 41-42);

A user interface communicating with said processor and capable of interfacing

with a user (col. 24, line 58 and col. 25, line 2);

An unfiltered data table communicating with said processor and capable of

storing one or more data item (col. 26, lines 13-21);

A filtered data table communicating with said processor and capable of storing

one or more filtered data items (col. 26, lines 13-21);

A filter tree table communicating with said processor and capable of storing one

or more selected data groupings (col. 26, lines 13-21);

Wherein said processor receives user inputs from said user interface (col. 4,

lines 50-65), controls a flow of data items into said unfiltered data table (col. 26, lines

13-21), generates at least one filtering query using selected data groupings in said filter

tree table (col. 27, lines 1-14), runs said at least one filtering query against said

unfiltered tree table (col. 28, lines 10-25), displays said filtered data table (col. 28, lines 10-25), displays said filter tree table, accepted user inputs to said filter tree table, and generates a filtering query upon receipt of a user input (col. 28, lines 10-25). Bolnick does not explicitly teach filter tree table. However, Bolnick teaches, "if the full query filtering is specified by the indexed frame, then control passes to step 302" (col. 27, lines 6-7). This teaches these frames are the table tree. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the frames structure as the tree table in order to provide the consistent of the data after filtering process.

Regarding on claim 38, Bolnick teaches information retrieval apparatus comprises a data server accessible to clients in a client-server arrangement (col. 32, lines 10-12).

Regarding on claim 39, Bolnick teaches a user computer that further includes input and output devices (mouse and monitor) (col. 32, lines 40-50).

Regarding on claim 40, Bolnick teaches a data source interface communicating with said processor and capable of receiving data from one or more external data sources (col. 32, lines 35-40).

Regarding on claim 41, Bolnick teaches a data source interface communicating

with said processor and capable of receiving data from one or more external data

source, and wherein said data source interface is capable of translating received data

items into a predetermined data format (col. 32, lines 9-12).

Regarding on claim 42, Bolnick teaches at least one internal data source

communicating with said processor (col. 32, lines 40-45).

Regarding on claim 43, Bolnick teaches filter tree table is capable of storing data

item counts corresponding to each data grouping (col. 25, lines 28-41).

Regarding on claim 44, Bolnick teaches filter tree table is capable of storing data

item results corresponding to each data grouping (col. 28, lines 10-15).

Regarding on claim 45, Bolnick teaches processor is capable of generating a

display of one or more data items corresponding to selected data groupings in said filter

tree table (col. 28, lines 10-18).

Regarding on claim 46, Bolnick teaches processor is capable of generating a

display of a parameter filter comprising data grouping stored in said filter tree table (col.

32, lines 35-40).

Regarding on claim 47, Bolnick processor is capable of generating a display of a parametric filter, comprising data grouping and data item counts stored in said filter tree table (col. 32, lines 35-40).

Regarding on claim 48, Bolnick processor is capable of generating a display of a parametric filter comprising data grouping and data item results stored in said filter tree table (col. 32, lines 35-40).

Conclusion

3.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

    Commissioner of Patents and Trademarks

    Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238   [After Final Communication}]
- (703) 746-7239   [Official Communication]

- (703) 746-7240   [Non-Official Communication]

Hand-delivered responses should be brought to:

> Crystal Park II
>
> 2121 Crystal Drive
>
> Arlington, VA 22202
>
> Fourth Floor (Receptionist).

Baoquoc N. To

June 13, 2003

SHAHID AL ALAM
PATENT EXAMINER